Dometic® Duo-Therm

RECORD THIS UNIT INFORMATION FOR FUTURE REFERENCE:
Model Number_____
Serial Number_____
Date Purchased_____

BRISK AIR®
579 Series, 590 Series, & 595 Series
ROOF TOP AIR CONDITIONER
USED WITH
3107210 AIR DISTRIBUTION BOX KIT and 3109226.005 COMFORT CONTROL CENTER ELECTRONIC KIT

USA
SERVICE OFFICE
The Dometic Corp.
509 So. Poplar St.
LaGrange, IN 46761
(260) 463-4858

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800-544-4881

C SA® US

⚠ WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

⚠ AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

INSTALLATION INSTRUCTIONS

MODELS

57908.521	57915.541	59516.303
57912.622	57915.546	59516.331
57912.631	57915.622	59516.336
57915.322	57915.631	59516.501
57915.331	57915.731	59516.531
57915.422	59016.521	59516.536
57915.522	59016.531	59516.601
57915.531	59016.621	59516.603
57915.536	59016.631	59516.631

REVISON
Form No. 3109395.032 11/03
(Replaces 3109395.024)
(French 3109660.039)

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LaGrange, IN 46761

Important: These instructions must stay with unit. Owner read carefully.

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word , **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

⚠ WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury.

CAUTION used without the safety alert symbol indicates, a potentially hazardous situation which, if not avoided may result in property damage.

Read and follow all safety information and instructions.

1. GENERAL INFORMATION

A. THIS AIR CONDITIONER IS DESIGNED FOR:

1. Installation on a recreational vehicle during the time the vehicle is manufactured.
2. Mounting on the roof of a recreational vehicle.
3. Roof construction with rafters/joists on minimum of 16 inch centers.
4. Minimum of 2.00 inches and maximum of 4.00 inches distance between roof to ceiling of recreational vehicle. Alternate installation methods will allow for roofs more than 4.00 inches thick.

B. The ability of the air conditioner to maintain the desired inside temperature depends on the heat gain of the RV. Some preventative measures taken by the occupants of the RV can reduce the heat gain and improve the performance of the air conditioner. During extremely high outdoor temperatures, the heat gain of the vehicle may be reduced by:

1. Parking the RV in a shaded area
2. Using window shades (blinds and/or curtains)
3. Keeping windows and doors shut or minimizing usage
4. Avoiding the use of heat producing appliances

Operation on High Fan/Cooling mode will give optimum or maximum efficiency in high humidity or high outside temperature.

Starting the air conditioner early in the morning and giving it a "head start" on the expected high outdoor ambient will greatly improve its ability to maintain the desired indoor temperature.

For a more permanent solution to a high heat gain, accessories like A&E outdoor patio and window awnings will reduce heat gain by removing the direct exposure to the sun. They also add a nice area to enjoy company during the cool of the evening.

C. Condensation

Note: The manufacturer of this air conditioner will not be responsible for damage caused by condensed moisture on ceilings or other surfaces. Air contains moisture and this moisture tends to condense on cold surfaces. When air enters the RV, condensed moisture may appear on the ceiling, windows, metal parts, etc. The air conditioner removes this moisture from the air during normal operation. Keeping doors and windows closed when this air conditioner is in operation will minimize condensed moisture on cold surfaces.

SPECIFICATIONS

MODEL NO.	NOMINAL CAPACITY (BTU/HR) COOLING	ELECTRICAL RATING	COMPRESSOR RATED LOAD AMPS	COMPRESSOR LOCKED ROTOR AMPS	FAN MOTOR RATED LOAD AMPS	FAN MOTOR LOCKED ROTOR AMPS	SCFM-HIGH SPEED MAX/MIN	TOTAL STATIC MAX/MIN " W. C.	REFRIGERANT R-22 (OZ)	MINIMUM WIRE SIZE*	AC PROTECTION *** USER SUPPLIED	INSTALLED WEIGHT (POUNDS)	MINIMUM GENERATOR SIZE** 1 UNIT/ 2 UNITS
57908.521	7,100	115VAC, 60 HZ., 1PH.	6.6	34.0	2.5	5.8	325 / 250	0.55 / 0.90	17.0	12 AWG Copper up to 24'	20 Amp	75	2.5 KW / 4.0 KW
57912.622	11,000		8.5	48.3	2.5	5.8	325 / 250	0.55 / 0.90	18.0		20 Amp	94	2.5 KW / 4.0 KW
57912.631	11,000		8.5	48.3	2.5	5.8	325 / 250	0.55 / 0.90	18.0		20 Amp	94	2.5 KW / 4.0 KW
57915.322	13,500		11.4	58.0	2.5	5.8	325 / 250	0.55 / 0.90	15.5		20 Amp	100	3.5 KW / 5.0 KW
57915.331	13,500		11.4	58.0	2.5	5.8	325 / 250	0.55 / 0.90	15.5		20 Amp	100	3.5 KW / 5.0 KW
57915.422	13,500		11.5	50.0	2.5	5.8	325 / 250	0.55 / 0.90	14.5		20 Amp	100	3.5 KW / 5.0 KW
57915.522	13,500		12.1	59.0	2.5	5.8	325 / 250	0.55 / 0.90	16.5		20 Amp	94	3.5 KW / 5.0 KW
57915.531	13,500		12.7	60.0	2.0	5.6	325 / 250	0.55 / 0.90	16.5		20 Amp	102	3.5 KW / 5.0 KW
57915.536	13,500		12.1	59.0	2.5	5.8	325 / 250	0.55 / 0.90	16.5		20 Amp	94	3.5 KW / 5.0 KW
57915.541	13,500		11.3	62.0	2.5	5.8	325 / 250	0.55 / 0.90	16.0		20 Amp	94	3.5 KW / 5.0 KW
57915.546	13,500		11.3	62.0	2.5	5.8	325 / 250	0.55 / 0.90	16.0		20 Amp	94	3.5 KW / 5.0 KW
57915.622	13,500		11.0	54.4	2.5	5.8	325 / 250	0.55 / 0.90	16.5		20 Amp	94	3.5 KW / 5.0 KW
57915.631	13,500		11.0	54.4	2.5	5.8	325 / 250	0.55 / 0.90	16.5		20 Amp	94	3.5 KW / 5.0 KW
57915.731	13,500		11.3	56.0	2.5	5.8	325 / 250	0.55 / 0.90	15.0		20 Amp	94	3.5 KW / 5.0 KW
59016.521	15,000		12.9	71.0	2.5	6.0	350 / 250	0.40 /1.1 0	26.5		20 Amp	101	3.5 KW / 5.0 KW
59016.531	15,000		12.9	71.0	2.5	6.0	350 / 250	0.40 / 1.10	26.5		20 Amp	101	3.5 KW / 5.0 KW
59016.621	15,000		12.9	77.0	2.5	6.0	350 / 250	0.40 / 1.10	26.5		20 Amp	101	3.5 KW / 5.0 KW
59016.631	15,000		12.9	77.0	2.5	6.0	350 / 250	0.40 / 1.10	26.5		20 Amp	101	3.5 KW / 5.0 KW
59516.303	15,000		12.7	60.0	2.0	5.6	350 / 250	0.40 / 1.10	29.0		20 Amp	102	3.5 KW / 5.0 KW
59516.331	15,000		11.5	50.0	2.5	5.8	325 / 250	0.40 / 1.10	29.0		20 Amp	94	3.5 KW / 5.0 KW
59516.336	15,000		12.7	60.0	2.0	5.6	325 / 250	0.40 / 1.10	29.0		20 Amp	94	3.5 KW / 5.0 KW
59516.501	15,000		11.5	50.0	2.5	5.8	325 / 250	0.40 / 1.10	31.0		20 Amp	94	3.5 KW / 5.0 KW
59516.531	15,000		11.5	50.0	2.5	5.8	325 / 250	0.40 / 1.10	26.5		20 Amp	94	3.5 KW / 5.0 KW
59516.536	15,000		11.5	50.0	2.5	5.8	325 / 250	0.40 / 1.10	29		20 Amp	94	3.5 KW / 5.0 KW
59516.601	15,000		12.9	77.0	2.5	6.0	350 / 250	0.40 / 1.10	31.0		20 Amp	102	3.5 KW / 5.0 KW
59516.603	15,000		12.3	77.0	2.0	5.6	325 / 250	0.40 / 1.10	29.5		20 Amp	102	3.5 KW / 5.0 KW

* For wire lengths over 24 ft. consult the National Electric Code for proper sizing.

** Dometic Corporation gives **GENERAL** guidelines for generator requirements. These guidelines come from experiences people have had in actual applications When sizing the generator, the total power usage of your recreational vehicle must be considered. Keep in mind generators lose power at high altitudes and from lack of maintenance.

*** CIRCUIT PROTECTION: Time Delay Fuse or HACR Circuit Breakers Required.

INSTALLATION INSTRUCTIONS

1. PRECAUTIONS

⚠ WARNING

Improper installation may damage equipment/ could endanger life, cause serious injury and/ or property damage.

A. Read Installation and Operating Instructions carefully before attempting to start your air conditioner installation.

B. The Dometic Corporation will not be liable for any damages or injury incurred due to failure in following these instructions.

C. Installation must comply with the National Electrical Code and any State or Local Codes or regulations.

D. **DO NOT** add any devices or accessories to this air conditioner except those specifically authorized by Dometic.

E. This equipment must be serviced by qualified personnel and some states require these people to be licensed.

2. CHOOSING PROPER LOCATION FOR THE AIR CONDITIONER

This air conditioner is specifically designed for installation on the roof of a recreational vehicle (RV).

A. NORMAL LOCATION

The air conditioner is designed to fit over an existing roof vent opening. When the vent is removed, it normally creates a 14-1/4" X 14-1/4" (±1/8") opening.

B. OTHER LOCATIONS

When no roof vent is available or another location is desired, the following is recommended:

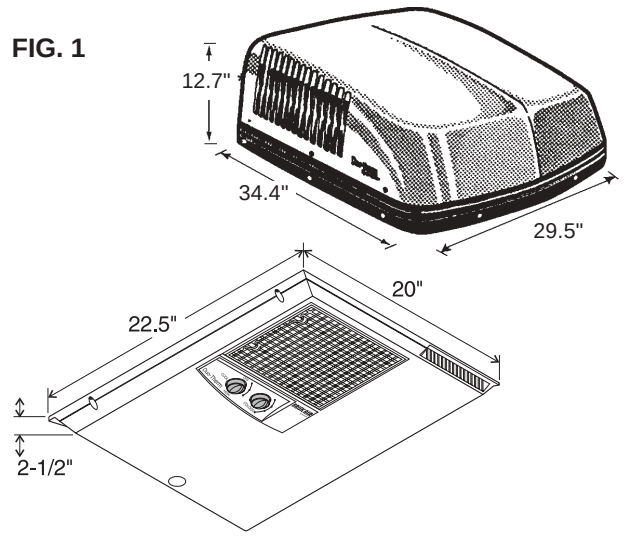
1. For one unit installation: The air conditioner should be mounted slightly forward of center (front to back) and centered from side to side.

2. For two unit installations: Install one Air Conditioner 1/3 and one Air Conditioner 2/3's from front of RV and centered from side to side.

It is preferred that the air conditioner be installed in a relatively **flat and level** roof section measured with the RV parked on a level surface.

Note: A 15° slant to **either** side, or front to back, is acceptable.

FIG. 1



C. AFTER LOCATION HAS BEEN SELECTED:

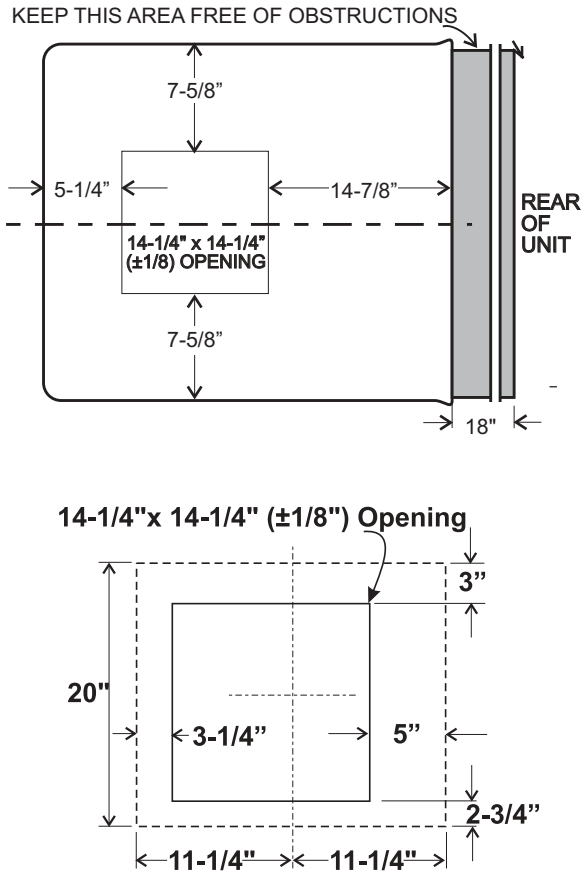
1. Check for obstructions in the area where air conditioner will be installed.
2. The roof must be designed to support 130 pounds when the RV is in motion. Normally a 200 lb. static load design will meet this requirement.

CAUTION

It is the responsibility of the installer of this air conditioner system to ensure structural integrity of the RV roof. Never create a low spot on the roof where water will collect. Water standing around the air conditioner may leak into the interior causing damage to the product and the RV.

3. Check inside the RV for air box obstructions (i.e. door openings, room dividers, curtains, ceiling fixtures, etc.)

FIG. 2



3. ROOF PREPARATION

Before preparing the ceiling opening, the type of system options must be decided upon. If a remote sensor is to be used, provision must be made for it. If the load shed option is to be used, wires must be run from the load shed control to the Dometic A/C. If a furnace is to be connected, wires must be run from the furnace to the Dometic A/C. **Read all of the following instructions before beginning the installation.**

⚠ WARNING

There may be electrical wiring between the roof and the ceiling. Disconnect 115 volt AC power cord and the positive (+) 12 volt DC terminal at the supply battery. Failure to follow this instruction may create a shock hazard causing death or severe personal injury.

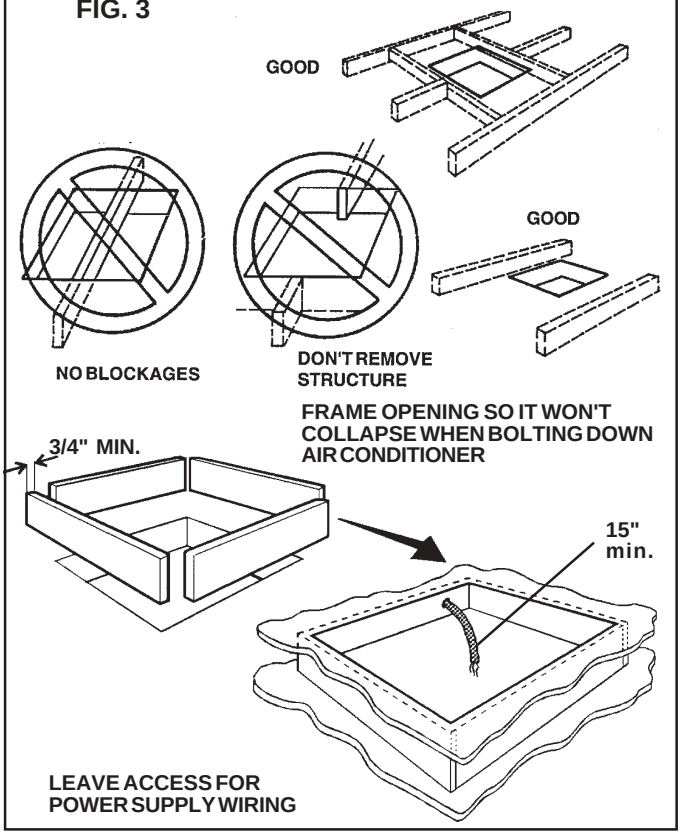
A. CEILING OPENING REQUIREMENTS

1. A 14-1/4" x 14-1/4" (±1/8") opening must be cut through the roof and ceiling of the RV. This opening must be located between the roof reinforcing members.
2. Mark a 14-1/4" x 14-1/4" (±1/8") square on the roof and carefully cut the opening.
3. Using the roof opening as a guide, cut the matching hole in the ceiling.

B. OPENING PREPARATION

1. If the opening exceeds 14-3/8" x 14-3/8", it will be necessary to install spacers.
2. If the opening is less than 14-1/8" x 14-1/8", it must be enlarged.
3. Route a copper 12 AWG, with ground, 115 VAC supply line from the fuse or circuit breaker box to the roof opening.
   a. This supply line must be located in the front portion of the 14-1/4" (±1/8") opening.
   b. The power MUST be on a separate 20 amp time delay fuse or HACR circuit breaker.
   c. Make sure that at least 15" of supply wire extends into the roof opening. This ensures easy connection at the junction box.
   d. Wiring must comply with all National, State and Local Wiring Codes.
   e. Use a steel sleeve and a grommet or equivalent methods to protect the wire where it passes into the opening.
4. The opening created must be framed to provide adequate support and prevent air from being drawn from the roof cavity. Lumber 3/4" or more in thickness must be used. Remember to provide an entrance hole for power supplies, furnace wiring, 4-conductor control cable, remote sensing and load shed (Energy Management System) options as desired.

FIG. 3



CAUTION

It is the responsibility of the installer of this air conditioner system to ensure structural integrity of the RV roof. Never create a low spot on the roof where water will collect. Water standing around the air conditioner may leak into the interior causing damage to the product and the RV.

5. The 14-1/4" x 14-1/4" (±1/8") opening is part of the return air system of the Air Conditioner and must be finished in accordance with NFPA Standard 501C Section 2.7.
6. Route a dedicated 12 VDC supply line (18-22 AWG) from the RV's converter or battery to the roof opening.
   a. Wire must be fused at 3 Amps.
   b. This supply line must be located in the front portion of the 14-1/4" (±1/8") opening.
   c. Make sure that at least 15" of supply wire extends into the roof opening.
   d. **In a multiple zone installation, this wiring is required in only one of the 14-1/4" (±1/8") openings**.
7. If a Remote Temperature Sensor is used, the connector end must be routed to the roof opening of the system which it will control. Make sure that at least 15" of the sensor cable extends into the roof opening. Refer to the Remote Sensor Instructions for details of the installation.
8. If a furnace is to be controlled by the system, the two furnace thermostat leads must be routed to the roof opening of the air conditioner that will control it. Make sure that at least 15" of the furnace thermostat wires extend into the roof opening.
9. If an Energy Management System (load shed feature) is to be used with the control, two wires must be routed to the roof opening of the zone to be managed. The signal required for this function is normally open relay contact. When the EMS calls for the compressor to shut off, the relay contacts should close. Make sure at least 15" of the EMS wires extend into the roof opening.
10. Route a 4-conductor control cable from the **Comfort Control Center**™ mounting position into the 14-1/4" (±1/8") roof opening. Make sure that at least 15" of the wire extends into the roof opening and 6" extend from the wall at the mounting position of the **Comfort Control Center**™.
11. In the event that other Air Conditioners are installed (additional zones) an additional 4-conductor control cable must be routed to the other Air Conditioners. Make sure that at least 15" of the wire extends into the roof opening. (See Fig. 16)
12. If an automatic generator start kit (AGS) will be installed, a 4-conductor control cable must be routed from the last air conditioner to location of AGS kit. Follow AGS kit instructions for installation.

4. DOMETIC COMFORT CONTROL CENTER™ & CABLE INSTALLATION

A. LOCATION

1. If the system is to be used **WITHOUT** a **Remote Temperature Sensor**, the proper location of the **Comfort Control Center**™ is very important to ensure that it will provide a comfortable RV temperature. Observe the following rules when selecting a location:
   a. Locate the **Comfort Control Center**™ 54" above the floor.
   b. Install the Comfort Control Center™ on a partition, not on an outside wall.
   c. **NEVER** expose it to direct heat from lamps, sun or other heat producing items.
   d. Avoid locations close to doors that lead outside, windows or adjoining outside walls.
   e. Avoid locations close to supply registers and the air from them.
2. If the system is to be used **WITH** a **Remote Temperature Sensor** in **ALL** zones, the Comfort Control Center may be mounted anywhere that is convenient in the coach. Try to avoid hard to reach and hard to see areas.
   a. Refer to the instructions provided with the **Remove Temperature Sensor** for details of installation.

3. A 3/8" diameter hole will be needed to route the cable through the wall.

B. CONTROL CABLE INSTALLATION

A 4-conductor control cable must be routed from the roof opening to the **Comfort Control Center™**.

1. Choose the shortest, most direct route from the 14-1/4" (±1/8") opening to the **Comfort Control Center™** location selected. Leave 6" of cable extending through the wall.
2. The control cable that should be used is a flat, 4-conductor telephone cable.
3. The control cable must be terminated with two (2) RJ-11 telephone connectors. Refer to the crimp tool manufacturer for crimping instructions.

Important: RJ-11 connectors must be installed as shown in FIG. 4A.

FIG. 4A

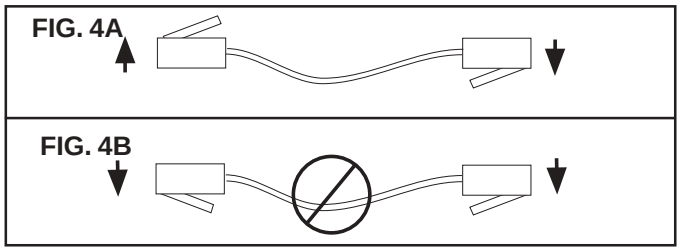
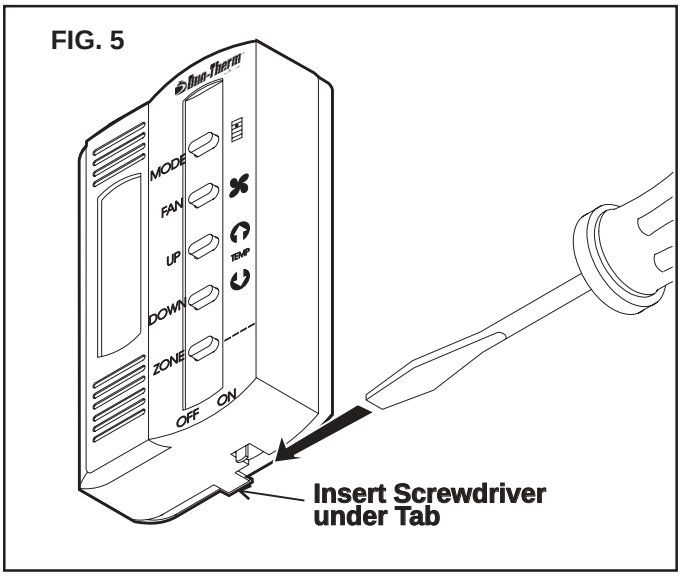


FIG. 4B

C. COMFORT CONTROL CENTER™ INSTALLATION

1. Carefully remove the base plate from the **Comfort Control Center™**. This may be accomplished by inserting a small screwdriver under the tab on the bottom edge of the front cover and gently prying. (See FIG. 5).

FIG. 5



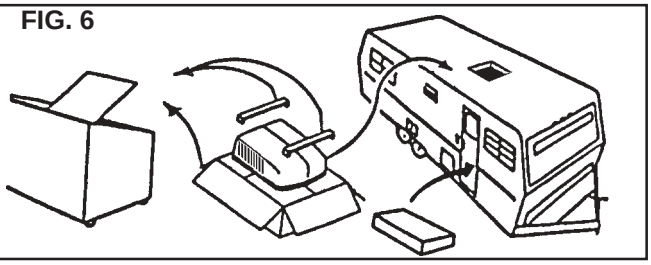
2. Insert the control cable through the hole in the base plate and mount the plate to the wall with the two screws provided. Check the alignment to ensure level installation.
3. Install the control cable RJ-11 connector into the back of the **Comfort Control Center™** and gently press onto the base plate.

5. PLACING THE AIR CONDITIONER ON THE ROOF

A. Remove the Air Conditioner from the carton and discard.

B. Place the Air Conditioner on the roof.

FIG. 6



⚠ WARNING

This unit weighs approximately 100 pounds. To prevent back injury, use a mechanical hoist to place Air Conditioner on roof.

C. Lift and place the unit over the prepared opening using the gasket on unit as a guide. The **exposed coil** goes toward the **rear** of the RV.

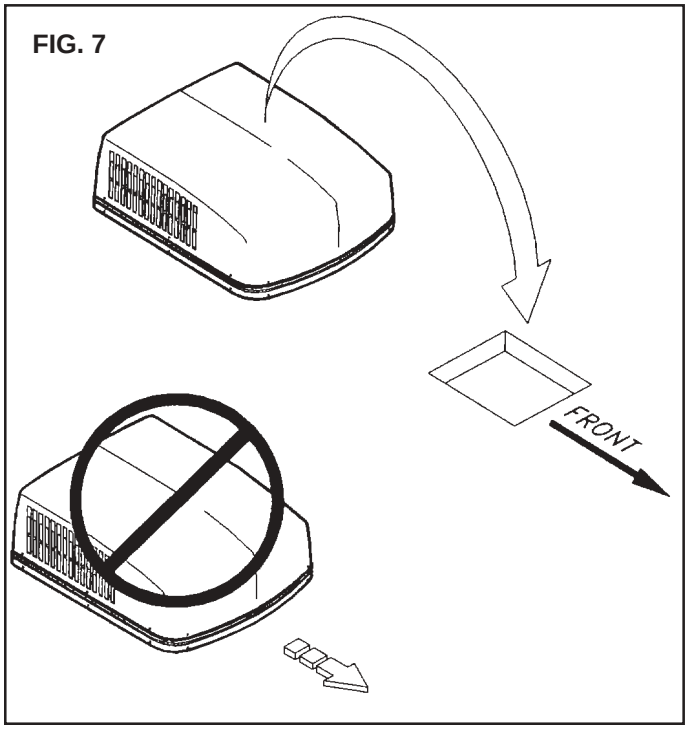
CAUTION

Do not slide the unit. This may damage the neoprene gasket attached to the bottom and create a leaky installation.

D. Place the Air Box Kit and Electronic Control Kit inside the RV. Both kits contain mounting hardware for the air conditioner and will be used inside the RV.

This completes the outside work. Minor adjustments can be done from the inside of the RV if required.

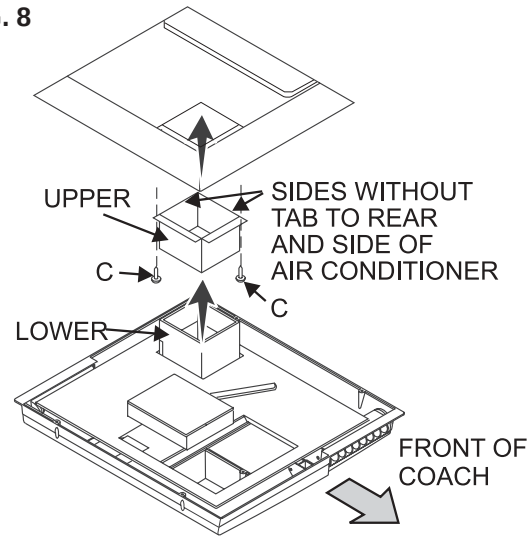
FIG. 7



6. DISCHARGE DUCT & CEILING TEMPLATE INSTALLATION

A. Remove the air box and mounting hardware from their carton. The upper duct is shipped inside the lower duct which is part of the ceiling template.

FIG. 8



B. Remove the upper duct from the ceiling template and locate it over the blower discharge.

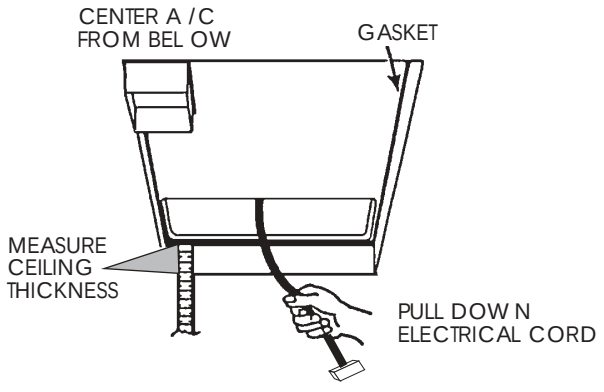
Note: The edge without the flange installs toward the **rear and side** of the opening.

C. Use two of the sharp pointed sheet metal screws to hold the duct to the base pan. The holes are prepunched in the pan for each location.

D. Check gasket alignment over roof opening and adjust if necessary (roof gasket centers over opening). Unit may be moved from below by lifting and sliding.

E. Reach up into the return air opening and pull the conduit power cable down for later connection. See FIG. 9.

FIG. 9



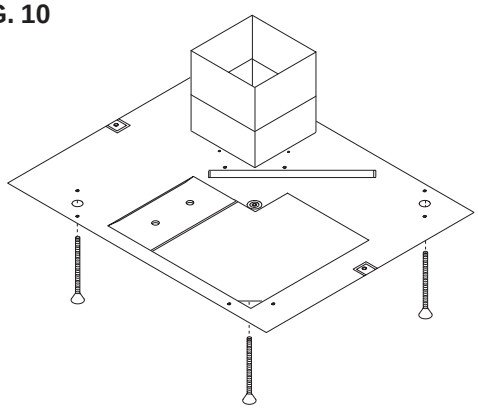
Note: In some applications it may be necessary to extend the 6 pin cable. Order cable number 3105584.001 if needed.

F. Measure the ceiling thickness:
1. If the distance is 2" to 3" remove the perforated tabs from the bottom duct only.
2. If the distance is 3" to 4" install ducts as received.
3. If the distance is 4" to 6" (maximum thickness), optional Duct Kit and Bolt Kit are available:
   Duct Kit (Part No. 3106775.004)
   Bolt Kit (Part No. 3100895.006)

G. Take the ceiling template and slide the lower unit over the upper duct.

H. Hold the ceiling template with one hand and with the other, install the four 1/4" mounting bolts through the template and into the base pan. See FIG. 10.
1. Finger-tighten the four (4) bolts and check alignment. There should be an equal opening on each side and the rear flange must be tight against the roof opening.
2. **EVENLY** tighten the bolts to a torque of 40 to 50 inch pounds. This will compress the roof gasket to approximately 1/2".

FIG. 10



CAUTION

If bolts are left loose there may not be an adequate roof seal or if over tightened, damage may occur to the air conditioner base or ceiling template. Tighten to torque specifications listed in this manual.

7. INSTALLATION OF ELECTRONIC CONTROL KIT

A. If your installation included the optional electric heat kit, install it at this time. Follow the instructions with the heat package for its installation procedure.

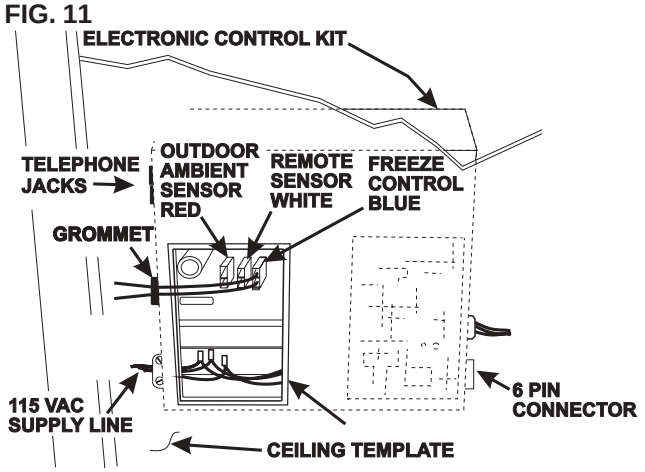
B. Terminate the 4-conductor control cable(s) protruding into the 14-1/4" x 14-1/4" (±1/8") roof opening. The cable(s) must be terminated with an RJ-11 telephone connector. Refer to the crimp tool manufacture for crimping instructions.

Important: RJ-11 connectors must be installed as shown in FIG. 4A.

C. Remove the junction box cover from the Electronic Control Kit. See FIG. 11.

D. Plug the electrical conduit (6-pin connector) from the upper unit into the mating connector in Electronic Control Kit. See FIG. 11.

FIG. 11

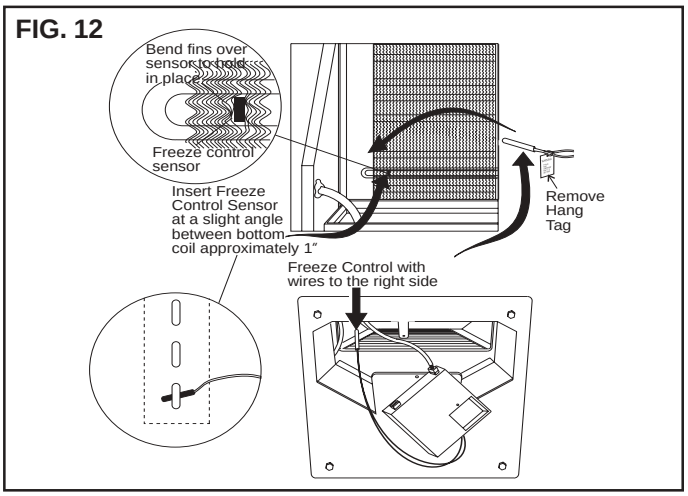


E. Plug the control cable(s) into the telephone jack(s) on the Electronic Control Kit. (It does not matter which one.)

F. Route the Remote Temperature Sensor cable, if applicable, through the same round grommet where freeze control wires go into the Electronic Box. See FIG. 11. Connect it to the connector that matches its color.

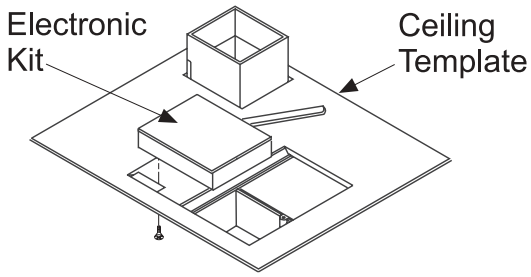
G. Insert the Freeze Control Sensor approximately 1" into the evaporator coil fins as shown in FIG. 12.

FIG. 12


Bend fins over sensor to hold in place
Freeze control sensor
Insert Freeze Control Sensor at a slight angle between bottom coil approximately 1"
Remove Hang Tag
Freeze Control with wires to the right side

H. Locate the electronic control kit on the ceiling template as shown in FIG. 13. Drive two (2) #10 x 3/8" blunt point phillips head screws (provided) through ceiling template into holes in electronic control kit to hold it in place.

FIG. 13



8. WIRING OF SYSTEM

A. CONNECTION OF LOW VOLTAGE WIRES

CAUTION

Disconnect the positive (+) 12 volt DC terminal at the supply battery. Damage to equipment could occur if the 12 volt DC is not shut off.

1. Connect the previously run 12 VDC to the red and black wires protruding from the Electronic Control Kit. (In multiple zone installations, this needs to be done at only one zone.) Connect +12 VDC to the red wire; -12 VDC to the black wire.
2. Connect the previously run furnace thermostat wires (if applicable) to the blue wires protruding from the electronic Control Kit. The polarity of these connections does not matter. If not used, terminate wire with twist connector.
3. Connect the previously run Energy Management System wires (if applicable) to the yellow wires protruding from the Electronic Control Kit. The polarity of these connections does not matter. If not used, terminate wire with twist connector.

B. CONNECTION OF 115 VOLT POWER SUPPLY

⚠ WARNING

Disconnect 115 volt AC. Failure to follow these instructions could create a shock hazard causing death or severe personal injury.

⚠ WARNING

This product is equipped with a 3-wire (grounded) system for protection against shock hazard. Make sure that the appliance is wired into a properly grounded 115 volt AC circuit and the polarity is correct. Failure to do so could result in death, personal injury or damage to the equipment.

1. Route the 115 VAC supply line through the strain relief in Electronic box. Tighten strain relief, making sure enough wire is inside electronic box to connect with unit 115 VAC wire. Tighten screws on strain relief connector being careful not to pinch and cut into the insulation on power supply leads.
2. Connect the white to white; black to black; and green to green or bare copper wire using appropriately sized twist wire connectors. **Tape** the twist wire connectors to the supply wiring to assure they do not vibrate off. See FIG. 14.
3. Push the wires into the box and tighten the strain relief.
4. Install the cover (part of the mounting hardware) with the one blunt point screw provided.

8. SYSTEM CONFIGURATION, RESET & CHECKOUT

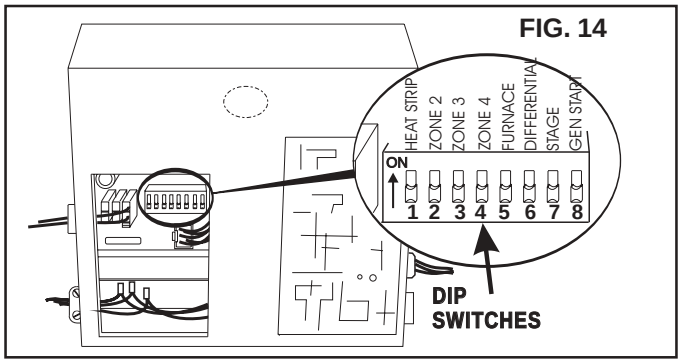
Now that the system is installed, it is necessary to configure the electronics and check all operations.

Refer to the Operating manual for a description of the air conditioner operation.

A. ELECTRONIC CONTROL KIT CONFIGURATION

Depending on the equipment options installed by the recreational vehicle manufacturer, the appropriate dip switches will need to be switched to the "ON" position. See FIG. 14. Placing the switch in the "ON" position selects that option.

FIG. 14



Note: Dip switches are in the "OFF" position when shipped from the factory.

1. Zone selection - when two or more units are installed and controlled by one Comfort Control Center, the second unit becomes Zone 2, the third unit Zone 3 and the fourth unit Zone 4. The appropriate zone dip switch must be set in each electronic control kit for Zone 2, 3 and 4.
2. Furnace selection - when a furnace has been connected to a zone, place the furnace dip switch "ON" for that zone.
3. Differential - differential is the temperature difference between the "ON/OFF" cycle of the thermostat. The normal differential is preset in the circuit board with the dip switch set to the "OFF" position. In some situations, it may be necessary to decrease the Differential. The location of the thermostat may create a condition where the normal Differential will not maintain your comfort zone. If this occurs, the Differential can be shortened by placing the Differential dip switch to the "ON" position.

Note: Setting the Differential dip switch should only be required when installation conditions are less than desirable and is not covered under the limited warranty.

4. Stage selection - stage is not used on these units. Leave in the "OFF" position.
5. Gen start selection - leave in the "OFF" position.

B. SYSTEM RESET

After setting the dip switches in the electronic control kit, do a system reset.

1. Turn the ON/OFF switch to the "OFF" position.
2. Simultaneously depress and hold the MODE and ZONE push-buttons while turning the ON/OFF switch to "ON". FF should appear in LCD display until the mode and zone push-buttons are released.
3. When a dip switch is turned on after initial configuration, a system reset will need to be done before the Comfort Control Center will recognize the updated selection.

C. SYSTEM CHECKOUT

Verify that all features of the installed system work. Check fan speeds, cooling mode, furnace (if connected) and heat strip. If the features do not work, check all wiring and confirm that the correct options have been selected on the Electronic Control Box. See **Comfort Control Center™** Operating Instructions.

9. AIR BOX INSTALLATION

A. Remove return air grille from air box by pulling in on half-round finger catches.
B. Hold air box up to ceiling template and install three (3) #10 x 3/8" (C) screws at air box mounting point.
C. Snap hole plug (E) into place at rear of air box.
D. Install four (4) wood screws (B) which hold the air box tight to ceiling, if desired.
E. Reinstall return air grille and filter into air box.
F. The air conditioner installation is now complete. Turn on power to the unit for operational check. Please read Unit Operating Instructions before proceeding.

Note: There are four optional mounting holes on the outer edge of the return air opening for which screws are provided. These are only required where an uneven ceiling does not allow proper fitting of the air box.

FIG. 15

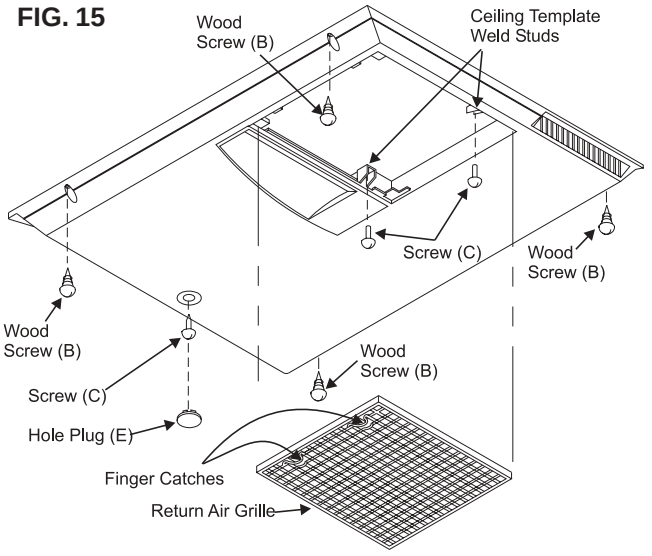
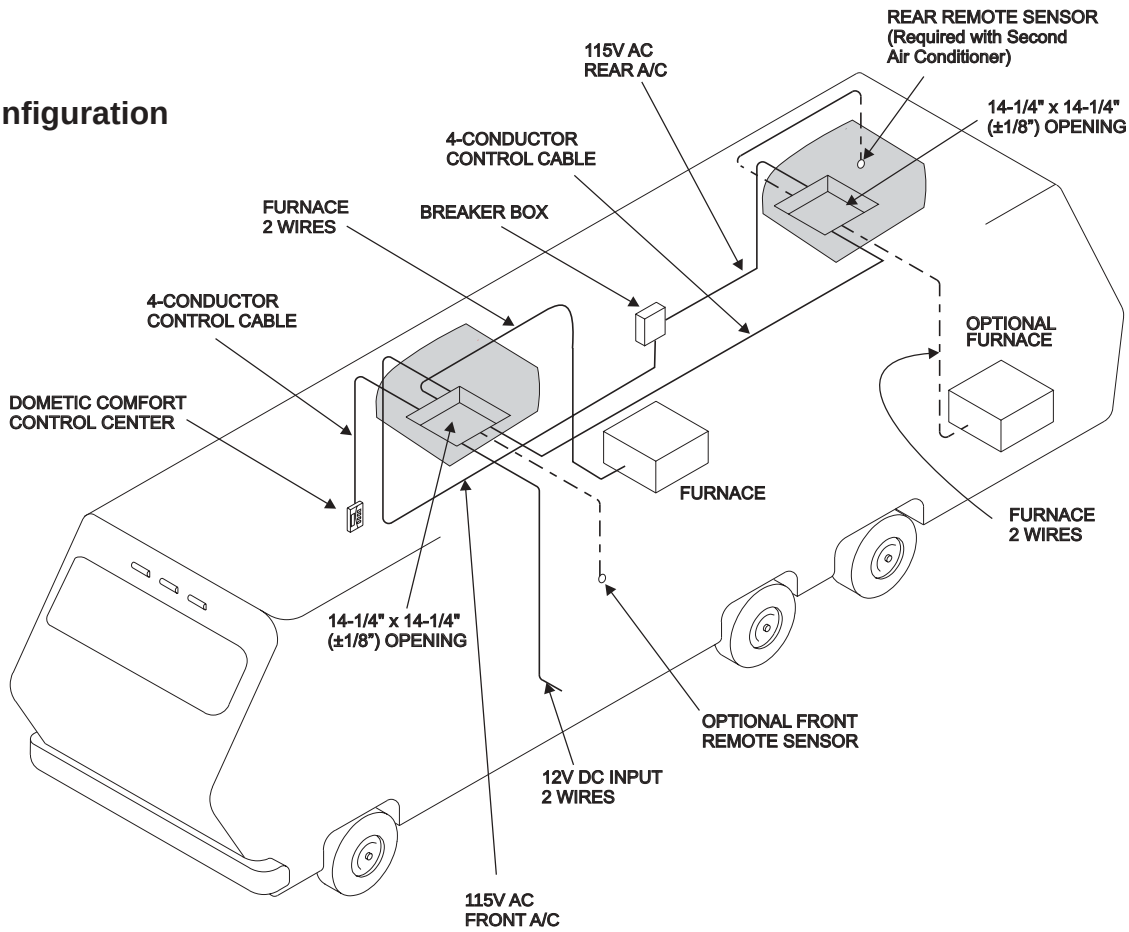


FIG. 16

Two Zone Configuration



MOUNTING PARTS

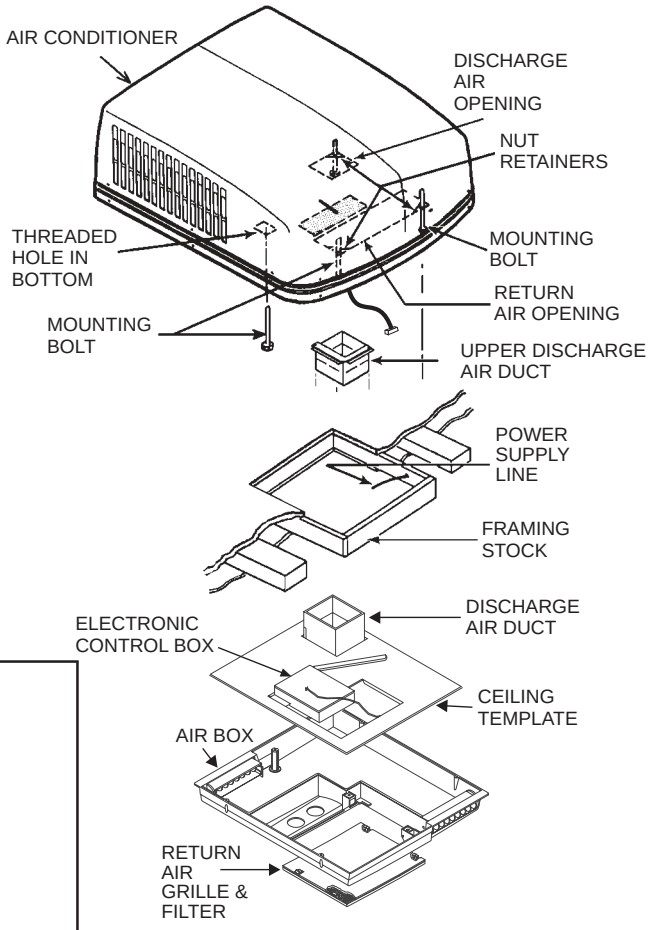
A. (4) 1/4" — #20 x 7" bolts

B. (4) #8 x 5/8" long sharp point wood screws

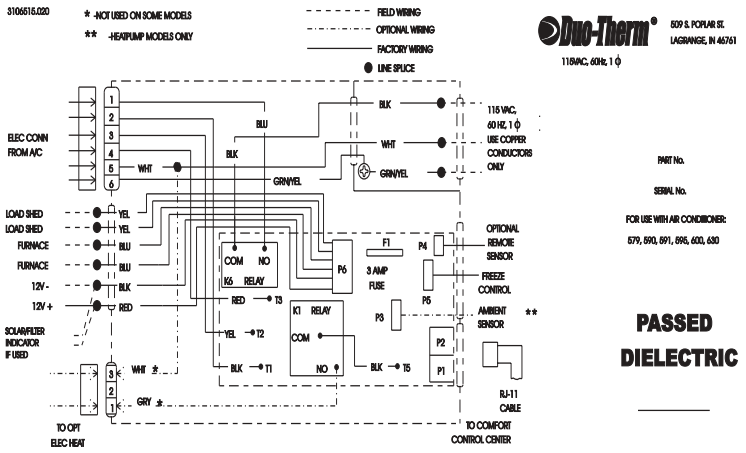
C. (7) #10 x 3/8" blunt point tapping screws

D. (1) Hole Plug

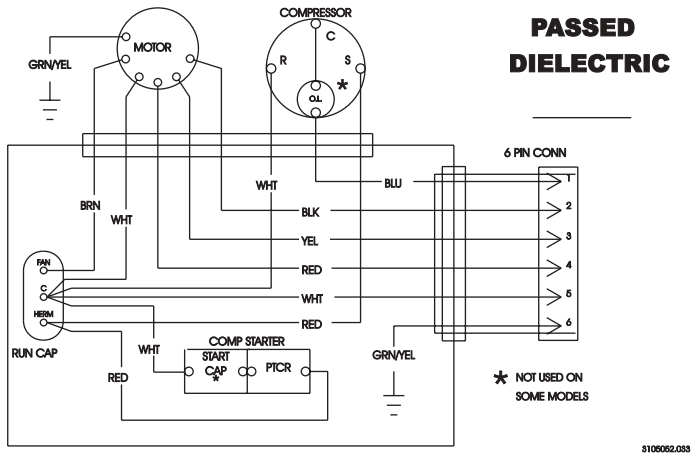
AIR CONDITIONING UNIT



ELECTRONIC CONTROL KIT



UNIT FIELD WIRING DIAGRAM



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